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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,266	06/07/2006	Hans Peter Weitzel	WAS0768PUSA	4695
22045	7590	06/12/2009	EXAMINER	
BROOKS KUSHMAN P.C. 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075			KOLLIAS, ALEXANDER C	
			ART UNIT	PAPER NUMBER
			1796	
			MAIL DATE	DELIVERY MODE
			06/12/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/596,266	<b>Applicant(s)</b> WEITZEL ET AL.	
	<b>Examiner</b> ALEXANDER C. KOLLIAS	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 33-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 33-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/12/2009 has been entered.

### ***Claim Objections***

2. Claim 40 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

3. Claim 39 recites a Markush group of biocidal compounds, Claim 40 which depends from claim 39 recites the identical Markush group of biocidal compounds. As such the requirement of 35 USC 112, 4th paragraph has not been met.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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5. Claim 48 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

6. Claim 48 recites that the biocide is incorporated into the water re-dispersible polymer powder by spray drying”. While the Specification, specifically the Abstract, discloses that biocides are added to the re-dispersible polymer powder, there is not explicit support in the Specification that the biocides are “incorporated into” the water re-dispersible polymer as recited in the present claims.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 33-42 and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Weitzel et al (2003/0018121).

Regarding claims 33-42, Weitzel et al discloses a composition comprising water re-dispersible polymer powder and biocides (Abstract, Page 1 [0009], Page 2 [0016], [0018], Page 3[0023]). The reference discloses that the polymer is mixed in an aqueous dispersion and spray dried. In order to prepare the composition the powder is mixed in the form of a dispersion or powder (Page 3 [0023] Page 4 [0038]). Given that the reference discloses that additives such as biocides are mixed with the polymer powder in dry form, it is clear that that the biocide in solid

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form is present in the water re-dispersible polymer powder composition, meeting the limitations recited in the claims 33. The amount of biocide added in the amount from 0.001 to 0.2 %, within the amount of 0.001 to 0.5 % presently recited in claim 33 (Page 3 [0028]). The reference discloses that the composition comprising the re-dispersible polymer and biocide comprises fillers such as calcium carbonate, silicates, talc, clays, quartz etc, thus it is clear that the reference meets the limitations drawn to a curable mineral construction product recited in the present claims (Page 3 [0030]). The reference discloses that the composition comprises a hydraulically setting miner binder such as lime and gypsum recited in claim 36 (Page 4, [0032]). Although the reference discloses that the composition may comprise inorganic binder such as cement, cement is not required thus meeting the limitations recited in claim 37 drawn to a curable construction product which is cement free. Regarding the biocides the reference discloses that the composition comprises biocides such as isothiazolinones such as dicloro-N-octylisothazolinone and benzimidazole derivatives, meeting the limitations recited in claims 38-40 (Page 3 [0028]). The reference discloses polymers such as homopolymer or copolymers comprising one or more monomers of vinyl esters, vinyl halides, methacrylate, 1,3-diene, vinyl-aromatic, olefin, and optionally further monomers (Page 1 [0009] and Page 2 [0015]). Additionally, the reference discloses copolymers such as vinyl acetate, ethylene, and a vinyl ester of alpha-branched monocarboxylic acid having 9 to 11 carbon atoms, or copolymers of styrene and one or more monomers such as methyl acrylate, ethyl acrylate, propyl acrylate, n-butyl acrylate or 2-ethylhexyl acrylate (Pages 1-2 [0016]). Given that the reference discloses that the polymer has a glass transition temperature from -10 to 25 degree C, it is clear that the polymer is film forming (Page 2 [0015]).

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Regarding the product by process limitations recited in claim 35, the reference discloses that the re-dispersible polymer powder is prepared by spray drying an aqueous dispersion comprising the polymer (Page 3, [0023]). As discussed above the reference discloses that the polymer powder in dry form is mixed with additives such as biocides (Page 4 [0038]). Therefore, the reference meets the limitations of spray drying an aqueous polymer dispersion to form a water re-dispersible polymer powder and the biocide is admixed in solid form with the water re-dispersible polymer powder recited in claim 35.

Although Weitzel does not disclose that the water re-dispersible polymer powder composition is prepared by spray drying an aqueous polymer dispersion together with the biocide recited in claim 34, it is noted that “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process”, *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) . Further, “although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product”, *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir.1983). See MPEP 2113.

Therefore, absent evidence of criticality regarding the presently claimed (process) and given that Weitzel meets the requirements of the claimed composition, (reference name) clearly meet the requirements of present claims.

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Regarding claim 47, Weitzel et al teaches all the claim limitations as set forth above. Additionally, the reference discloses a process wherein the additives, including binders such as carbonates, lime gypsum and biocides are mixed with the re-dispersible polymer powder in dry form (Page 4 [0032] and [0038]). The dry mix is produced and water needed for processing is added prior processing (Page 4 [0038]). The amount of biocide added in the amount from 0.001 to 0.2 %, within the amount of 0.001 to 0.5 % presently recited in claim 33 (Page 3 [0028]). Given that the reference discloses that additives such as biocides are mixed with the polymer powder in dry form, it is clear that that the biocide in solid form is present in the water re-dispersible polymer powder composition, meeting the limitations recited in the claims 33.

In light of the above, it is clear that Weitzel et al anticipates the presently recited claims.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 34, 44, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weitzel et al (2003/0018121) in view of Botts et al (US 7,070,795).

The discussion with respect to Weitzel et al as set forth in Paragraph 8 above is incorporated here by reference.

Regarding claim 34, Weitzel teaches all the claim limitations as set forth above. The reference teaches all the claim limitations as set forth above. However, Weitzel et al does not disclose a process wherein water re-dispersible polymer powder composition is prepared by spray drying an aqueous polymer dispersion together with a biocide.

Botts et al discloses active ingredients such as fungicides or insecticides which are entrapped in a polymeric matrix to form particles. The particles when applied release active ingredients at a rate to provide effective amounts of the active ingredients over a period of time (Abstract, Column 7, Lines 36-60, Column 8, Lines 16-27, Column 12, Lines 30-55, Column 15, Lines 28-64). The reference discloses method of producing the matrix particles that comprise



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such as spray dying so that the active ingredient is distributed uniformly throughout the polymer matrix (Page 18, Lines 5-12).

Given that Weitzel et al discloses a composition comprising water re-dispersible polymers and biocidal compounds and processes to spraying drying the re-dispersible polymer, in light of the particular advantages provided by the use and control of the spraying drying a polymer matrix with active ingredients as taught by Botts et al, it would therefore have been obvious to one of ordinary skill in the art to include such sprayed dried polymer and method of production in the composition and methods disclosed by Weitzel et al in order to obtain polymer particles which have active compounds distributed uniformly throughout.

Regarding claim 44, Weitzel teaches all the claim limitations as set forth above. The reference teaches all the claim limitations as set forth above. However, Weitzel et al does not disclose a process wherein water re-dispersible polymer powder composition is prepared by spray drying an aqueous polymer dispersion together with a biocide.

Botts et al discloses active ingredients such as fungicides or insecticides which are entrapped in a polymeric matrix to form particles. The particles when applied release active ingredients at a rate to provide effective amounts of the active ingredients over a period of time (Abstract, Column 7, Lines 36-60, Column 8, Lines 16-27, Column 12, Lines 30-55, Column 15, Lines 28-64). The reference discloses method of producing the matrix particles that comprise such as spray dying so that the active ingredient is distributed uniformly throughout the polymer matrix (Page 18, Lines 5-12).

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Given that Weitzel et al discloses a compositions comprising water re-dispersible polymers and biocidal compounds and processes to spraying drying the re-dispersible polymer, in light of the particular advantages provided by the use and control of the spraying drying a polymer matrix with active ingredients as taught by Botts et al, it would therefore have been obvious to one of ordinary skill in the art to include such sprayed dried polymer and method of production in the composition and methods disclosed by Weitzel et al in order to obtain polymer particles which have active compounds distributed uniformly throughout.

Regarding claim 47, Weitzel teaches all the claim limitations as set forth above. Additionally, the reference discloses biocides such as isothiazolinones such as dicloro-N-octylisothiazolinone and benzimidazole derivatives (Page 3 [0028]).

The reference teaches all the claim limitations as set forth above. However, Weitzel et al does not disclose a process wherein the biocides are incorporated into the water re-dispersible polymer powder by spray drying an aqueous polymer dispersion and a biocide.

Botts et al discloses active ingredients such as fungicides or insecticides which are entrapped in a polymeric matrix to form particles. The particles when applied release active ingredients at a rate to provide effective amounts of the active ingredients over a period of time (Abstract, Column 7, Lines 36-60, Column 8, Lines 16-27, Column 12, Lines 30-55, Column 15, Lines 28-64). The reference discloses method of producing the matrix particles that comprise such as spray dying so that the active ingredient a distributed uniformly throughout the polymer matrix (Page 18, Lines 5-12).

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Given that Weitzel et al discloses a compositions comprising water re-dispersible polymers and biocidal compounds and processes to spraying drying the re-dispersible polymer, in light of the particular advantages provided by the use and control of the spraying drying a polymer matrix with active ingredients as taught by Botts et al, it would therefore have been obvious to one of ordinary skill in the art to include such sprayed dried polymer and method of production in the composition and methods disclosed by Weitzel et al in order to obtain polymer particles which have active compounds distributed uniformly throughout.

### ***Double Patenting***

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 33-35 and 37-46 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1-3, 5, 11-13, 15, and 17 of U.S. Patent No.

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6,740,692 in view of Botts et al (US 7,070,795). Although the conflicting claims are not identical, they are not patentably distinct from each other because of the reasons given below.

Claims 1-3, 5, 11-13, 15, and 17 of U.S. Patent No. 6,740,692 recite a water re-dispersible polymer powder composition comprising a re-dispersible polymer comprising vinyl ester monomers or copolymers comprising vinyl acetate, ethylene and vinyl esters of alpha-branched monocarboxylic acids having from 9 to 11 carbon atoms. Additionally, the claims recite a biocide such as isothiazolinones which are added in the amount from 0.001 to 2 % by weight. While 6,740,692 does not claim the particular isothiazolinones, note that Col. 5, Lines 63-67 and Col. 6 Lines 1-10 which states that the composition comprises isothiazolinones such as N-octylisothiazolinone, dichloro-N-octylisothiazolinone, etc and benzimidazole. Case law holds that those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an application defines an obvious variation of an invention claimed in the patent. In re Vogel, 422 F.2d 438, 164 USPQ 619,622 (CCPA 1970).

While the claims in US 6,740,692 and the instant application are open to the inclusion of additional ingredients (cf. the use of "comprising" in the claims), it is noted that Claims 1-3, 5, 11-13, 15, and 17 of US 6,740,692 do not recite that the biocide is present in a spray dried water re-dispersible polymer powder.

Botts et al discloses active ingredients such as fungicides or insecticides which are entrapped in a polymeric matrix to form particles. The particles when applied release active ingredients at a rate to provide effective amounts of the active ingredients over a period of time (Abstract, Column 7, Lines 36-60, Column 8, Lines 16-27, Column 12, Lines 30-55, Column 15,

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Lines 28-64). The reference discloses method of producing the matrix particles that comprise such as spray dying so that the active ingredient a distributed uniformly throughout the polymer matrix (Page 18, Lines 5-12).

Given that US 6,740,692 is drawn to a composition comprising a water re-dispersible polymer and biocides, as well as methods of producing the compositions and Botts discloses that incorporation of active ingredients into a polymeric matrix by methods such as spray drying results in uniform distribution of the active compound, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the polymer recited in US 6,740,693 to include a spray dried particles as disclosed by Botts and thereby arrive at the presently claimed invention.

15. Claims 33-35 and 37-46 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 6,740,692. Specifically, see the discussion as set forth in Paragraph 25 above.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in

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the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C.

103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2). Specifically, see the discussion as set forth in Paragraph 9 above.

16. Claims 33-35 and 37-46 are directed to an invention not patentably distinct from claims 1-3, 5, 11-13, 15, and 17 of commonly assigned patent. Specifically, the discussion set forth in Paragraph 10 above.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned U.S. Patent No. 6,740,692, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

***Response to Arguments***

17. Applicant's arguments filed 5/12/2009 have been fully considered but they are not persuasive.

18. Applicant's arguments regarding unexpected results regarding the biocidal activity of the present invention, i.e., a biocide incorporated into the dry water re-dispersible polymer added to compositions as compared to adding the biocide and water re-dispersible polymer separately to compositions are not found to be persuasive for the following reasons. While inventive Examples 1 and 2 comprise 22.5 and 10.5 ppm of N-octylisothiazolinone while Comparative Example 4 comprises a larger concentration (225 ppm) of the same biocidal ingredient, it is noted that the comparison of Inventive Examples 1 and 2 to Comparative Example 4 is not a proper side-by-side comparison, i.e., the amount of biocide in both the comparative and inventive examples (either 1 or 3) would have to be identical. Additionally, it is noted that Comparative Example 4 discloses that after 9 and 12 months respectively a "small amounts of growth" was observed (as designated by the "+" symbol) while Inventive Examples 1 and 2 displayed no growth (as designated by the "0" symbol). While the Applicant's definition of "zero growth" is clear, the definition of a "small amount of growth", are not, i.e. how much does "small growth" differ from no growth.

The present claims disclose that the composition comprises a generic re-dispersible polymer and a biocide. However, the Examples comprise a specific biocide and polymer, namely N-octylisothiazolinone and a copolymer of vinyl acetate and ethylene. As such the

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inventive Examples are not commensurate with the scope of the present claims. Furthermore, it is noted that the present claims recite that the biocide comprises 0.001 to 0.1 % of the polymer, while the inventive examples comprise 0.00105 to 0.00225 % of a biocide. As set forth in MPEP 716.02(d), whether unexpected results are the result of unexpectedly improved results or a property not taught by the prior art, "objective evidence of nonobviousness must be commensurate in scope with the claims which the evidence is offered to support". In other words, the showing of unexpected results must be reviewed to see if the results occurred over the entire claimed range, *In re Clemens*, 622 F.2d 1029, 1036, 206 USPQ 289, 296 (CCPA 1980). Applicants have not provided data to show that the unexpected results do in fact occur over the entire claimed range of biocide.

Furthermore, it is noted that the Inventive Examples are not commensurate with the scope of the present claims given that the examples in the examples the biocide incorporated into the polymer or polymer matrix by spray drying while the present claim require that the biocide is present in the water re-dispersible polymer composition.

Even if the inventive and comparative examples were proper side-by-side comparisons and commensurate in scope with the present claims, it is the Examiner's position that arguments regarding unexpected results would not be persuasive given that it is the Examiner's position that it is obvious the encapsulation or inclusion of biocidal or active ingredients into a polymeric matrix will result in prolonged or controlled release of these ingredients from the polymeric matrix. Evidence to support this position is found in the Patent to Botts which discloses active ingredients such as fungicides or insecticides which are entrapped and uniformly dispersed in a polymeric matrix by methods such as spray drying in a release rate as to provide effective



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amounts of these ingredients to the applied area over a period of time (Abstract, Column 7, lines 36-60, Column 8, Lines 16-27, Column 12, Lines 30-55, Column 15, Lines 28-64m Column 18, Lines 5-12 of Botts).

Further, with respect to the anticipation rejection of the present claims using Weitzel, as cited in MPEP 706.02(b), it is noted that a rejection based on 35 USC 102(b), can only be overcome by (a) persuasively arguing that the claims are patentably distinguishable from the prior art, (b) amending the claims to patentably distinguish over the prior art, or (c) perfecting priority under 35 USC 119(e) or 120. As can be seen, comparative data is not sufficient to overcome an anticipatory rejection under 102(b).

19. Regarding Applicant's arguments regarding the obviousness type double patenting rejections set forth previously, given the presently amended claims, the previously applied double patenting rejections are withdrawn except for those maintained above, for the reasons set forth in Paragraph 9 above.

### ***Conclusion***

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEXANDER C. KOLLIAS whose telephone number is (571)-270-3869. The examiner can normally be reached on Monday-Friday, 8:00 AM -5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571)-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. C. K./

Examiner, Art Unit 1796

/Vasu Jagannathan/

Supervisory Patent Examiner, Art Unit 1796